To: Kady, Thomas[Kady.Thomas@epa.gov]
From: Egan, Robert
Sent: Tue 4/4/2017 8:19:45 PM
Subject: FW: Fresh look at proposed well locations
Proposed Well Locations 4-3-17.pdf

Tom,

For your review. Let's talk sometime this week if possible.

Thanks.

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

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From: Faust, Matt [mailto:mfaust@bristol-companies.com]
Sent: Tuesday, April 04, 2017 3:02 PM
To: Egan, Robert <egan.robert@epa.gov>
Cc: Allen, Bob <ballen@bristol-companies.com>
Subject: Fresh look at proposed well locations

Bob,

Bob Allen and I have taken a fresh look at ideal locations for additional monitoring wells at the Tower site based on the newly updated S2C2 model. Of the following locations, a few are listed as ideally being clusters of 3 wells: one at the water table, one targeting the vertical core of the plume, and one at the bedrock contact. In these situations, I think the deepest (bedrock contact) well is the lowest priority. In addition, our fifth location (an up gradient well) is a lower priority than the other four.

•□□□□□□ Location 1

- On the shore of Haskell Lake between locations of VAS-11 and VAS-01, near the currently interpreted 10 ug/L total VOC isocontour.
- Approximately 1,990,325 Easting, 272,240 Northing.
- Well cluster of 2-3 wells. Ideally, one at the water table, one at a depth presumed to correspond with the vertical core of the plume (~elevation of 1,530 feet above MSL, based on VAS-11 and MW-16 well cluster), and one at the bedrock contact (lower priority).
- Purpose: to better define the influx into Haskell Lake

•□□□□□□ Location 2

- On the shore of Haskell Lake between the locations of VAS-02 and VAS-03, near the currently interpreted 10 ug/L total VOC isocontour
- At approximately 1,990,520 Easting, 272,200 Northing.
- Anticipated rig accessibility issues, so install as close as possible to this location.
- Well cluster of 2-3 wells. Ideally, one at the water table, one at a depth presumed to correspond with the vertical core of the plume (~elevation of 1,535 feet above MSL, based on VAS-02), and one at the bedrock contact (lower priority).
- Purpose: to better define the influx into Haskell Lake

•□□□□□□ Location 3

- West-northwest of the location of BH-30, south of the location of MW-19 well cluster, near the interpreted horizontal core of the plume (where the 300 ug/L total VOC isocontour approaches the shore of the pond)
- At approximately 1,990,540 Easting, 272,320 Northing.
- Cluster of 2-3 wells, Ideally one at the water table, one at a depth to correspond with

the vertical core of the plume (~elevation of 1,540 feet above MSL, based on VAS-02 and MW-21 cluster), and one at the bedrock contact (lower priority)

- Purpose: Fill in data gap and refine kriging between two apparent groundwater plums

•□□□□□□ Location 4

- Between MW-17 well cluster and VAS-02
- At approximately 1,990,450 Easting, 272,300 Northing.
- One well screened at a depth corresponding with the highest concentrations at VAS-02 and MW-16 well cluster (1,530-1,535 feet above MSL)
- Purpose: Filling in data gap between two groundwater plumes AND testing possibility that MW-17D is not screened deep enough to capture the highest dissolved concentrations

•□□□□□□ Location 5

- On north side of State Highway 70, vicinity of MW-2 or east of MW-2 to be directly up gradient of source area
- At approximately 1,990,700 Easting, 272,550 Northing,
- One well screened at depth, corresponding with deeper source area wells (MW-20D, MW-21M, MW-21D
- Purpose: Collection of up-gradient, non-impacted, groundwater chemistry data

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